TABLE 72

Higher education R&D expenditures at institutions with a medical school, by state, institutional control, and institution: FY 2021

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Medical school R&D expenditures
Alabama		
Public		
U. Alabama, Birmingham	644,330	460,741
U. South Alabama	47,610	23,869
Arizona		
Public		
U. Arizona	770,031	261,081
Arkansas		
Public		
U. Arkansas for Medical Sciences	194,709	194,708
California		
Public		
U. California, Davis	817,409	225,347
U. California, Irvine	523,752	182,213
U. California, Los Angeles	1,454,880	936,434
U. California, Riverside	189,600	15,470
U. California, San Diego	1,425,499	574,570
U. California, San Francisco	1,710,036	1,486,618
Private		
Charles R. Drew U. of Medicine and Science <sup>a</sup>	13,228	1,706
Loma Linda U.	14,029	11,962
Stanford U.	1,274,483	874,048
Touro U.	3,489	1,121
U. Southern California	955,565	526,791
Western U. of Health Sciences	6,688	1,128
Colorado	5,555	,,
Public		
U. Colorado Anschutz Medical Campus <sup>b</sup>	562,855	396,106
Connecticut	302,033	330,100
Public		
U. Connecticut	302,329	112,221
Private	302,323	112,221
Yale U.	1,165,148	964,412
District of Columbia	1,103,140	904,412
Private		
George Washington U.	266,108	61,311
Georgetown U.	279,932	175,749
Howard U.	52,412	18,340
Florida	32,412	10,540
Public		
Florida Atlantic U.	58,471	7,629
Florida International U.	246,075	15,978
Florida State U.	328,604	25,944
U. Central Florida	218,596	6,331
U. Florida	959,965	413,416
U. South Florida <sup>c</sup>	405,088	156,108
Private	04.510	11 507
Nova Southeastern U.	24,513	11,537
U. Miami Georgia	375,841	295,865

TABLE 72

Higher education R&D expenditures at institutions with a medical school, by state, institutional control, and institution: FY 2021

(Dollars in thousands)

116,480 852,922 51,989 32,637 271,768 47,210 429,585 731,268 44,036 10,961 913,178 13,805 107,398 497,651	108,454 542,947 5,639 32,637 30,580 18,340 208,133 291 36,453 5,966 688,103 12,119 103,591 337,673
852,922 51,989 32,637 271,768 47,210 429,585 731,268 44,036 10,961 913,178 13,805 107,398 497,651	542,947 5,639 32,637 30,580 18,340 208,133 291 36,453 5,966 688,103 12,119 103,591 337,673
51,989 32,637 271,768 47,210 429,585 731,268 44,036 10,961 913,178 13,805 107,398 497,651	5,639 32,637 30,580 30,580 18,340 208,133 291 36,453 5,966 688,103 12,119 103,591 337,673
51,989 32,637 271,768 47,210 429,585 731,268 44,036 10,961 913,178 13,805 107,398 497,651	5,639 32,637 30,580 30,580 18,340 208,133 291 36,453 5,966 688,103 12,119 103,591 337,673
32,637 271,768 47,210 429,585 731,268 44,036 10,961 913,178 13,805 107,398 497,651	32,637 30,580 18,340 208,133 291 36,453 5,966 688,103 12,119 103,591 337,673
271,768 47,210 429,585 731,268 44,036 10,961 913,178 13,805 107,398 497,651	30,580 18,340 208,133 291 36,453 5,966 688,103 12,119 103,591 337,673
47,210 429,585 731,268 44,036 10,961 913,178 13,805 107,398 497,651	18,340 208,133 291 36,453 5,966 688,103 12,119 103,591 337,673
47,210 429,585 731,268 44,036 10,961 913,178 13,805 107,398 497,651	18,340 208,133 291 36,453 5,966 688,103 12,119 103,591 337,673
47,210 429,585 731,268 44,036 10,961 913,178 13,805 107,398 497,651	18,340 208,133 291 36,453 5,966 688,103 12,119 103,591 337,673
429,585 731,268 44,036 10,961 913,178 13,805 107,398 497,651	208,133 291 36,453 5,966 688,103 12,119 103,591 337,673
429,585 731,268 44,036 10,961 913,178 13,805 107,398 497,651	208,133 291 36,453 5,966 688,103 12,119 103,591 337,673
429,585 731,268 44,036 10,961 913,178 13,805 107,398 497,651	208,133 291 36,453 5,966 688,103 12,119 103,591 337,673
731,268 44,036 10,961 913,178 13,805 107,398 497,651	291 36,453 5,966 688,103 12,119 103,591 337,673
44,036 10,961 913,178 13,805 107,398 497,651	36,453 5,966 688,103 12,119 103,591 337,673
10,961 913,178 13,805 107,398 497,651	5,966 688,103 12,119 103,591 337,673
10,961 913,178 13,805 107,398 497,651	5,966 688,103 12,119 103,591 337,673
913,178 13,805 107,398 497,651	5,966 688,103 12,119 103,591 337,673
913,178 13,805 107,398 497,651	688,103 12,119 103,591 337,673
13,805 107,398 497,651	12,119 103,591 337,673
107,398 497,651	103,591 337,673
497,651	337,673
695,258	458,446
695,258	458,446
030,200	100,110
553,876	316,951
333,070	310,331
5,258 i	756 i
3,230 1	700 1
385,637	159,256
303,037	139,230
420.241	160 076
429,241	168,976
200,362	135,711
44.270	20,200
	39,299
24,600	24,600
005.006	70.700
205,206	78,702
6.234	1,246
0,20 1	
0,20 1	
	471,849
	293,540
	44,370 24,600 205,206 6,234

TABLE 72

Higher education R&D expenditures at institutions with a medical school, by state, institutional control, and institution: FY 2021

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Medical school R&D expenditor
Johns Hopkins U. <sup>e</sup>	3,181,385	754,413
Massachusetts		
Public		
U. Massachusetts, Medical School	347,337	347,337
Private		
Boston U.	652,096	193,605
Harvard U.	1,254,008	399,656
Tufts U.	224,956	49,379
Michigan		
Public		
Central Michigan U.	21,726	10,493
Michigan State U.	710,178	85,501
Oakland U.	20,261	47
U. Michigan, Ann Arbor	1,639,645	660,061
Wayne State U.	235,519	158,775
Western Michigan U. and Homer Stryker M.D. School of Medicine	25,314	5,375
Minnesota		3,5
Public		
U. Minnesota, Twin Cities	1,072,961	344,702
Mississippi	.,0,2,50.	0.17.02
Public		
U. Mississippi	116,175	51,429
Missouri	110,170	01,129
Public		
U. Missouri, Columbia	388,779	60,196
U. Missouri, Kansas City	33,855	7,334
Private	33,000	7,004
Saint Louis U.	79,005	38,745
Washington U., Saint Louis	989,214	878,809
Nebraska	909,214	878,809
Public		
U. Nebraska, Medical Center	200,974	121,542
Private	200,974	121,042
Creighton U.	23,251	15,709 i
Nevada	23,231	13,709 1
Public		
U. Nevada, Las Vegas	101,009	7,516
U. Nevada, Reno	175,386	36,445
New Hampshire	175,300	30,443
Private		
Dartmouth C. and Dartmouth Hitchcock Medical Center	220.226	140 441
New Jersey	330,226	149,441
Public		
	26 450	10.000
Rowan U.  Rutgers, State U. New Jersey, New Brunswick	26,458 643,955	10,809 315,754
·	043,933	313,/34
New Mexico		
Public LL New Mexico	222 566	100,000
U. New Mexico	332,566	189,939
New York Public		

TABLE 72

Higher education R&D expenditures at institutions with a medical school, by state, institutional control, and institution: FY 2021

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Medical school R&D expenditures
CUNY, City C.	57,361	3,870
SUNY, Downstate Health Sciences U.	34,459	33,555
SUNY, Stony Brook U.	274,516	125,081
SUNY, U. Buffalo	425,349	173,934
SUNY, Upstate Medical U.	44,870	35,677
Private		
Albany Medical C.	22,443	22,443
Albert Einstein C. of Medicine	301,715	301,714
Columbia U. in the City of New York	1,098,570	588,930
Cornell U.	1,183,524	512,076
Hofstra U.	5,545	268
Icahn School of Medicine at Mount Sinai	820,260	820,260
New York Institute of Technology	4,465	2,858
New York Medical C.	18,872	17,098
New York U.	1,063,704	703,546
U. Rochester	409,255	255,944
North Carolina		
Public		
East Carolina U.	51,662	16,284
U. North Carolina, Chapel Hill	1,205,883	700,242
Private		
Duke U.	1,237,686	1,001,689
Wake Forest U.	264,216	250,219
North Dakota		
Public		
U. North Dakota	143,506	26,108
Ohio		25,100
Public		
Northeast Ohio Medical U.	13,853	12,612
Ohio State U.	1,236,111	715,150
Ohio U.	49,764	10,228
U. Cincinnati	551,826	443,667
U. Toledo	53,169	18,512
Wright State U.	26,259	9,192
Private	20,207	2,122
Case Western Reserve U.	421,868	347,262
Oklahoma	121,000	017,202
Public		
Oklahoma State U., Center for Health Sciences	7,758	7,758
U. Oklahoma, Norman and Health Science Center	380,048	125,288
U. Oklahoma, Tulsa	7,185	2,095
Oregon	7,100	2,030
Public		
Oregon Health and Science U.	452,812	266,062
Pennsylvania	402,012	200,002
Public		
Pennsylvania State U., University Park and Hershey Medical Center	070 544	127 567
	970,544	127,567
Temple U.	299,778	107,003
U. Pittsburgh, Pittsburgh Private	1,135,416	833,234

TABLE 72

Higher education R&D expenditures at institutions with a medical school, by state, institutional control, and institution: FY 2021 (Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Medical school R&D expenditure
Drexel U.	152,752	48,776
Philadelphia C. of Osteopathic Medicine	6,186	3,349
Thomas Jefferson U.	200,393	182,868
U. Pennsylvania	1,631,950	1,101,897
Rhode Island		
Private		
Brown U.	276,331	146,373
South Carolina		
Public		
Medical U. South Carolina	277,761	230,972
U. South Carolina, Columbia	215,374	20,076
South Dakota		
Public		
U. South Dakota	27,537	8,732
Tennessee		
Public		
East Tennessee State U.	18,449	9,231
U. Tennessee, Health Science Center	109,562	109,562
Private		
Meharry Medical C.	15,840	13,870
Vanderbilt U. and Vanderbilt U. Medical Center	1,019,273	527,414
Texas		
Public		
Sam Houston State U.	13,315	369
Texas A&M U., College Station and Health Science Center	1,147,720	43,498
Texas Tech U., Health Sciences Center	41,583	26,239
Texas Tech U., Health Sciences Center, El Paso	11,360	9,238
U. Houston	202,536	715
U. North Texas, Health Science Center	50,698	3,809
U. Texas Health Science Center, Houston	308,823	175,096
U. Texas Health Science Center, San Antonio	219,734	174,351
U. Texas Medical Branch	185,759	178,201
U. Texas Rio Grande Valley	58,187	22,814
U. Texas Southwestern Medical Center	632,134	626,614
U. Texas, Austin	779,348	36,493
Private	775,010	30,150
Baylor C. of Medicine	716,976	716,976
Texas Christian U.	15,336	51
U. of the Incarnate Word	1,982	585
Utah	1,502	000
Public		
U. Utah	624,737	217,758
Vermont	027,101	217,700
Public		
U. Vermont	195,320	103,813
Virginia	170,020	100,010
Public		
Eastern Virginia Medical School	19,415	19,219
U. Virginia, Charlottesville	611,313	312,818
Virginia Commonwealth U.	364,096	193,979

TABLE 72

Higher education R&D expenditures at institutions with a medical school, by state, institutional control, and institution: FY 2021

(Dollars in thousands)

State, institutional control, and institution	All R&D expenditures	Medical school R&D expenditure
Virginia Polytechnic Institute and State U.	542,045	0
Private		
Edward Via C. of Osteopathic Medicine	6,629	6,629
Liberty U.	937	206
Washington		
Public		
U. Washington, Seattle	1,488,645	763,365
Washington State U.	357,648	9,470
West Virginia		
Public		
Marshall U.	23,620	14,736
West Virginia School of Osteopathic Medicine	1,255	1,255
West Virginia U.	199,907	52,177
Wisconsin		
Public		
U. Wisconsin-Madison	1,380,075	479,404
Private		
Medical C. Wisconsin	276,850	276,843
Puerto Rico		
Public		
U. Puerto Rico, Medical Sciences Campus	44,111	13,690
Private		
Ponce Health Sciences U.	23,297	20,825
U. Central del Caribe	3,831	3,831

## i = imputed.

## Note(s)

The source for medical schools is institution response to survey question 4.

## Source(s)

National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2021.

<sup>&</sup>lt;sup>a</sup> MD degrees are granted by the University of California, Los Angeles (UCLA) through the Drew/UCLA Medical Education program, a partnership between the Charles R. Drew University of Medicine and Science and the UCLA, David Geffen School of Medicine.

<sup>&</sup>lt;sup>b</sup> The University of Colorado Denver and University of Colorado Anschutz Medical Center report to the survey separately. Prior to FY 2021, expenditures were reported together under University of Colorado Denver and Anschutz Medical Campus.

<sup>&</sup>lt;sup>c</sup> The University of South Florida includes expenditures from the University of South Florida, Tampa; University of South Florida, Saint Petersburg; and University of South Florida, Sarasota-Manatee campuses. Due to the consolidation of the three campuses that occurred on 1 July 2020, University of South Florida, Saint Petersburg and University of South Florida, Sarasota-Manatee began reporting with the University of South Florida, Tampa as the University of South Florida. Prior to FY 2021, all three campuses reported to the survey as separate institutions.

<sup>&</sup>lt;sup>d</sup> The University of Maryland includes expenditures from the University of Maryland, Baltimore and University of Maryland, College Park campuses. In FY 2019, the two campuses began reporting as one research unit to reflect their new strategic partnership. This relationship was codified through the University of Maryland Strategic Partnership Act passed by the Maryland General Assembly in 2016. Prior to FY 2019, both campuses reported to the survey as separate institutions.

e Johns Hopkins University includes the Applied Physics Laboratory, with \$1,949,752 thousand in total R&D expenditures in FY 2021.